EduSahara™ Assignment

Name : Circle Basics

Chapter : Circles

Grade : SSC Grade IX

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1. The mid-point of the diameter of a circle is called

   (i) radius (ii) semi-circle (iii) centre (iv) chord (v) major segment

2. A line segment joining any point on the circle with its centre is called

   (i) centre (ii) diameter (iii) radius (iv) chord (v) major segment

3. A line segment having its end points on the circle is called a

   (i) chord (ii) major segment (iii) segment (iv) radius (v) centre

4. A chord that passes through the centre of the circle is called

   (i) major segment (ii) semi-circle (iii) centre (iv) circumference (v) diameter

5. A chord of a circle divides the whole circular region into two parts, each called a

   (i) radius (ii) semi-circle (iii) centre (iv) chord (v) segment

6. The segment of the circle containing the centre of the circle is called

   (i) circumference (ii) radius (iii) semi-circle (iv) segment (v) major segment

7. Half of a circle is called

   (i) semi-circle (ii) major segment (iii) diameter (iv) radius (v) centre

8. The perimeter of a circle is called

   (i) semi-circle (ii) segment (iii) radius (iv) circumference (v) centre

9. Which of the following statements are true?

   a) Every circle has a unique diameter.
   b) A line can meet a circle atmost at two points.
   c) Each radius of a circle is also a chord of the circle.
   d) A circle consists of an infinite number of points.
   e) Every circle has a unique centre.

   (i) {a,b,d} (ii) {b,d,e} (iii) {c,d} (iv) {a,c,e} (v) {a,b}

10. Which of the following statements are true?

    a) One and only one tangent can be drawn to a circle from a point outside it.
    b) Every circle has a unique diameter.
    c) An infinite number of diameters may be drawn for a circle.
    d) An infinite number of chords may be drawn for a circle.
    e) Two semi-circles of a circle together make the whole circle.

    (i) {a,c} (ii) {b,d} (iii) {a,b,e} (iv) {c,d,e} (v) {a,c,d}

11. Which of the following statements are true?

a) Every circle has a unique diameter.
b) One and only one tangent can be drawn to a circle from a point outside it.
c) Diameter of a circle is a part of the semi-circle of the circle.
d) A secant of a circle is a segment having its end points on the circle.
e) One and only one tangent can be drawn to pass through a point on a circle.

(i) {b,e} (ii) {b,e,c} (iii) {c,e} (iv) {a,c} (v) {d,a,c}

12. If the diameter of a circle is 28 cm, what is its radius?

(i) 13 cm (ii) 12 cm (iii) 14 cm (iv) 16 cm (v) 15 cm

13. If the radius of a circle is 70 cm, what is its diameter?

(i) 138 cm (ii) 139 cm (iii) 141 cm (iv) 140 cm (v) 142 cm

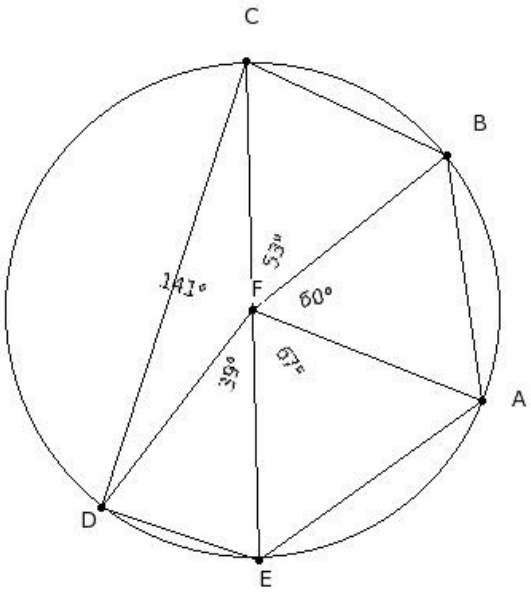
14. If the radius of a circle is 77 cm, what is its circumference?

(i) 483 cm (ii) 485 cm (iii) 486 cm (iv) 482 cm (v) 484 cm

15. Two circles with equal radii are

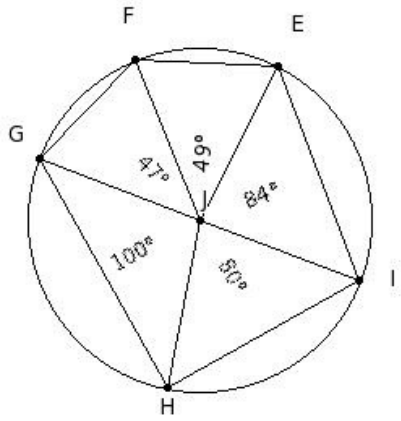
(i) concentric (ii) not similar (iii) only similar but not congruent (iv) congruent

16. The centre of the circle is



(i) B (ii) A (iii) C (iv) D (v) F

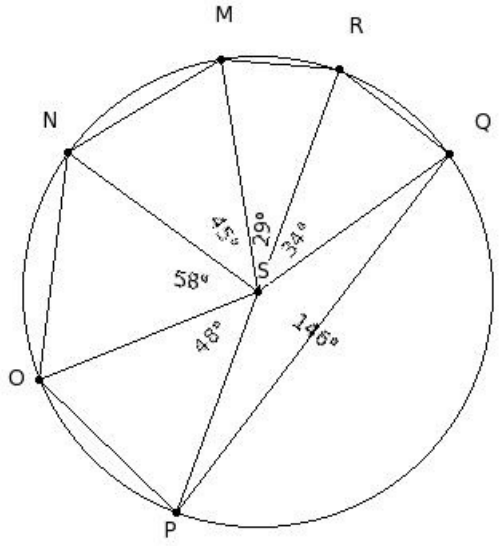
17. The chords of the circle are



(i) $\overline{EF}, \overline{FG}, \overline{GH}, \overline{HI}, \overline{IE}$ (ii) $\overline{JE}, \overline{JF}, \overline{JG}, \overline{JH}, \overline{JI}$ (iii) $\overline{EF}, \overline{FG}, \overline{GH}, \overline{HI}, \overline{IE}, \overline{JG}$ (iv) $\overline{EF}, \overline{FG}, \overline{GH}, \overline{HI}, \overline{IE}, \overline{GI}$

(v) $\overline{FG}, \overline{GH}, \overline{HI}, \overline{IE}$

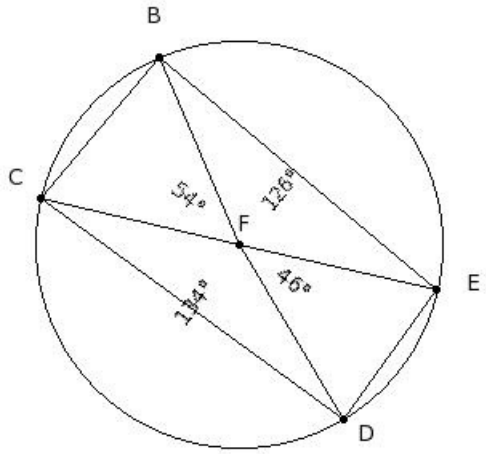
18. The diameters of the circle are



(i) $\overline{PR}$ (ii) $\overline{MN}, \overline{NO}, \overline{OP}, \overline{PQ}, \overline{QR}, \overline{RM}$ (iii) $\overline{MN}, \overline{NO}, \overline{OP}, \overline{PQ}, \overline{QR}, \overline{RM}, \overline{PR}$ (iv) $\overline{SM}, \overline{SN}, \overline{SO}, \overline{SP}, \overline{SQ}, \overline{SR}, \overline{PR}$

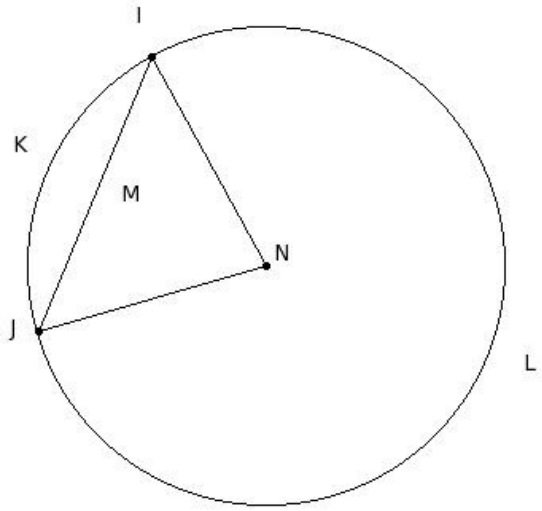
(v) $\overline{SM}, \overline{SN}, \overline{SO}, \overline{SP}, \overline{SQ}, \overline{SR}$

19. The radii of the circle are



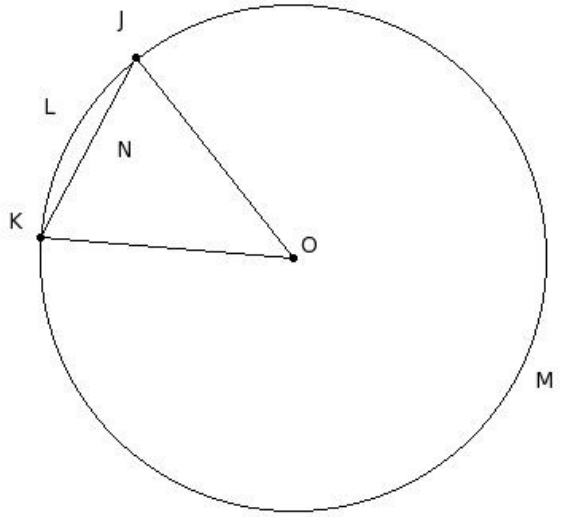
(i) $\overline{FB}, \overline{FC}, \overline{FD}, \overline{FE}$ (ii) $\overline{CD}, \overline{DE}, \overline{EB}$ (iii) $\overline{BC}, \overline{CD}, \overline{DE}, \overline{EB}$ (iv) $\overline{BC}, \overline{CD}, \overline{DE}, \overline{EB}, \overline{CE}$ (v) $\overline{BC}, \overline{CD}, \overline{DE}, \overline{EB}, \overline{FE}$

20. The minor sector of the circle is



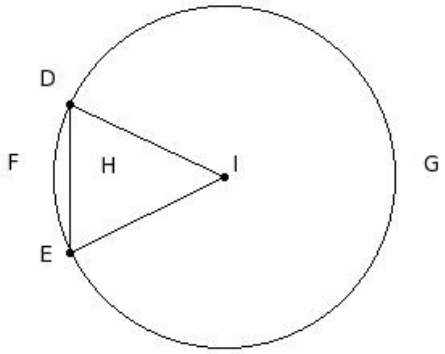
(i) ILJMI (ii) NIKJN (iii) ILJ (iv) IKJMI (v) NILJN

21. The major sector of the circle is



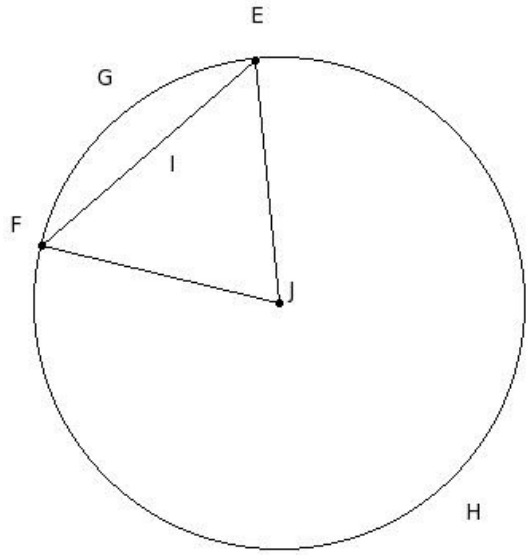
(i) JMKNJ (ii) OJLKO (iii) JLK (iv) JMK (v) OJMKO

22. The minor arc of the circle is



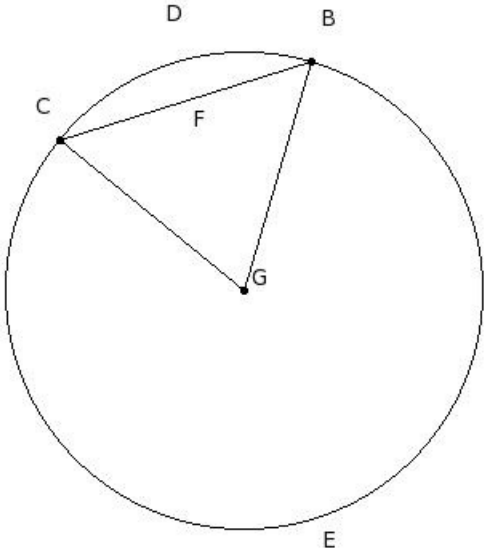
(i) DFE (ii) DGEHD (iii) IDGEI (iv) DGE (v) DFEHD

23. The major arc of the circle is



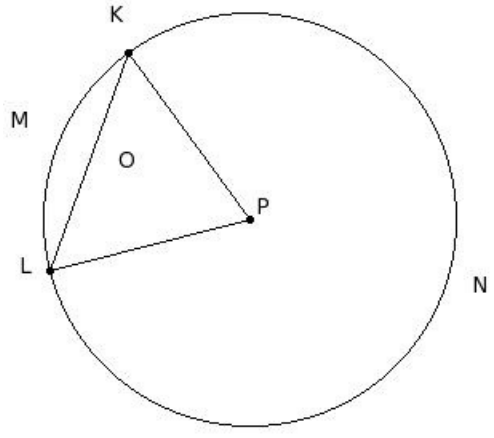
(i) EGF (ii) EHF (iii) EGFIE (iv) EHFIE (v) JEGFJ

24. The minor segment of the circle is



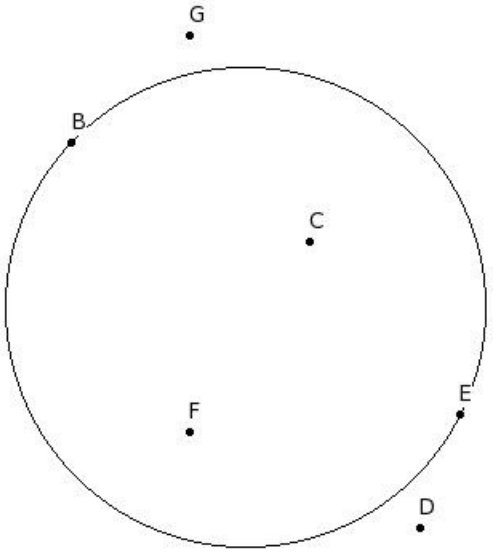
(i) BEC (ii) BDC (iii) BDCFB (iv) GBDCG (v) GBECG

25. The major segment of the circle is



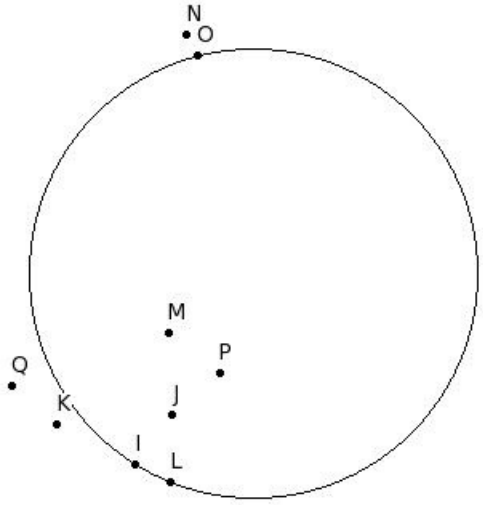
(i) KML (ii) KNLOK (iii) PKNLP (iv) PKMLP (v) KMLOK

26. Find the points belonging to the circle



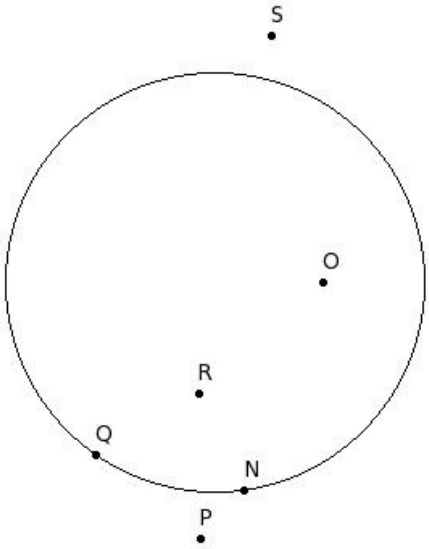
(i) {B,E} (ii) {C,B} (iii) {C,F} (iv) {E,D} (v) {D,G}

27. Find the points belonging to the inside of the circle



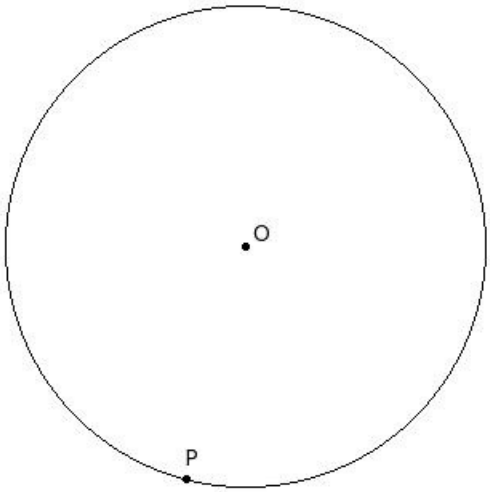
(i) {O,M,J} (ii) {J,N,M} (iii) {J,M,P} (iv) {K,N,Q} (v) {I,L,O}

28. Find the points belonging to the outside of the circle



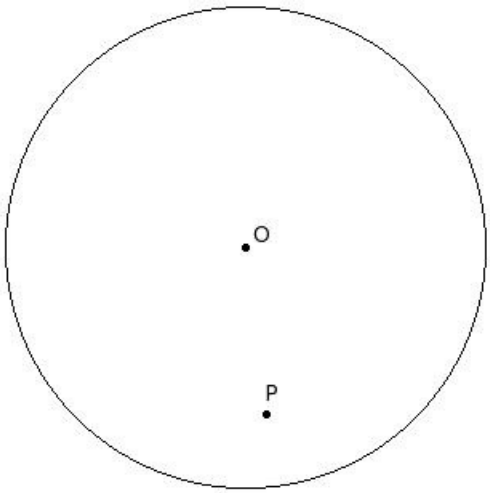
(i) {P,Q} (ii) {P,S} (iii) {O,R} (iv) {O,P} (v) {N,Q}

29. 'O' is the centre of a circle of radius 'r' and 'P' is any point in its plane. If $\overline{OP}$ = r ,then P is



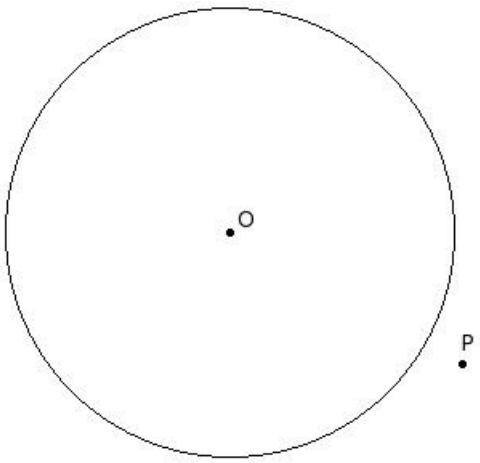
(i) on the circle (ii) outside the circle (iii) inside the circle

30. 'O' is the centre of a circle of radius 'r' and 'P' is any point in its plane. If $\overline{OP}$ < r,then P is



(i) inside the circle (ii) on the circle (iii) outside the circle

31. 'O' is the centre of a circle of radius 'r' and 'P' is any point in its plane. If $\overline{OP}$ > r,then P is



(i) inside the circle (ii) on the circle (iii) outside the circle

32. The distance around the circle is called

(i) radius (ii) circumference (iii) arc (iv) chord (v) diameter

33. A line which intersects the circle at two distinct points is called a

(i) secant (ii) diameter (iii) quadrant (iv) centre (v) major segment

34. A line which touches a circle at only one point is called a

(i) tangent (ii) semi-circle (iii) circumference (iv) chord (v) secant

35. If the two radii OP and OQ of a circle are at right angles to each other, then the sector OPQ is called a

(i) quadrant (ii) circumference (iii) major segment (iv) secant (v) radius

36. Which of the following statements are true?

a) A chord divides a circle into two sectors.
b) The radius is the shortest chord.
c) Atmost one chord can be drawn on a circle with a certain length.
d) A chord divides a circle into two segments.
e) The diameter is the longest chord.

(i) {d,e} (ii) {b,e} (iii) {b,e,d} (iv) {a,d} (v) {c,a,d}

37. Which of the following statements are true?

a) No two chords bisects each other.
b) Equal length chords are equidistant from the centre of the circle.
c) The farther the chord is from the centre, the larger the angle it subtends at the centre.
d) Equal length chords subtend equal angles at the centre of the circle.
e) The longest chord of the circle passes through the centre of the circle.

(i) {a,c,e} (ii) {c,d} (iii) {a,b,d} (iv) {a,b} (v) {b,d,e}

38. Which of the following statements are true?

a) A sector is the area enclosed by two radii and a chord.
b) A circle divides the plane on which it lies into three parts.
c) The area enclosed by a chord and its major arc is called major segment.
d) The diameter divides the circle into two unequal parts.
e) The area enclosed by a chord and its minor arc is called minor segment.

(i) {a,b} (ii) {d,c} (iii) {a,d,e} (iv) {b,c,e} (v) {a,b,c}

39. Which of the following statements are true?

a) Two chords bisect each other.
b) The diameter divides the circle into two unequal parts.
c) The longest of all chords of a circle is called diameter.
d) The midpoint of any diameter of a circle is its centre.
e) A sector is the area enclosed by two radii and a chord.

(i) {b,d,c} (ii) {b,d} (iii) {c,d} (iv) {a,c} (v) {e,a,c}

40. Which of the following statements are true?

a) Only one circle can be drawn with a centre.
b) Atmost one circle can be drawn passing through three non-collinear points.
c) Exactly two tangents can be drawn parallel to a secant.
d) Only one circle can be drawn passing through two points.
e) Infinite circles can be drawn passing through three collinear points.

(i) {e,a,b} (ii) {a,b} (iii) {b,c} (iv) {d,c} (v) {d,c,b}

41. The point of intersection of the angular bisectors of a triangle is

(i) centroid (ii) orthocentre (iii) incentre (iv) circumcentre (v) excentre

42. If the radius of the circumcircle is half the length of a side of the triangle, then the triangle is

(i) equilateral triangle (ii) acute angled triangle (iii) obtuse angled triangle (iv) right angle triangle

43. Circles having common centre are called

(i) intersecting circles (ii) congruent circles (iii) similar circles (iv) concentric circles

44. If two circles are concentric, then

(i) their perimeters are same (ii) their radii are same (iii) their diameters are same

(iv) their centres are same

45. Which of the following figures represent a chord ?

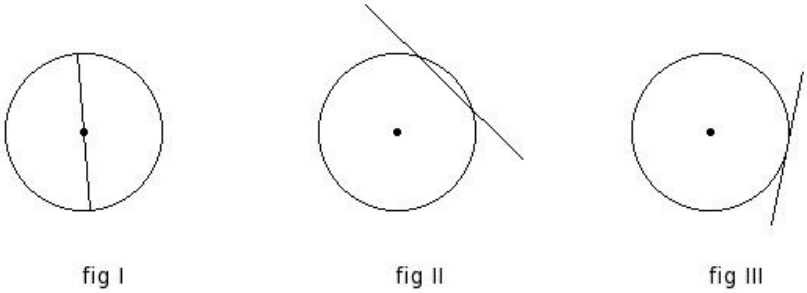


fig I fig II fig III

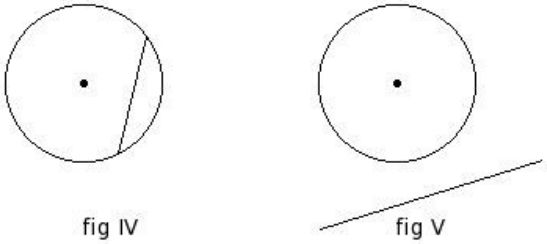


fig IV fig V

(i) fig II (ii) fig III (iii) fig V (iv) fig I (v) fig IV

46. Which of the following figures represent a diameter ?

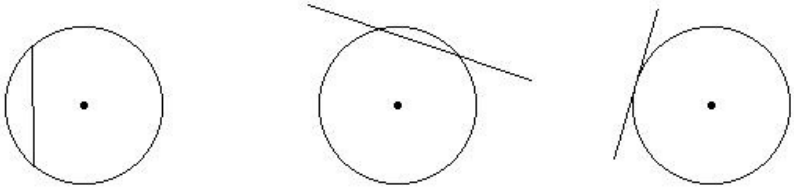


fig I fig II fig III

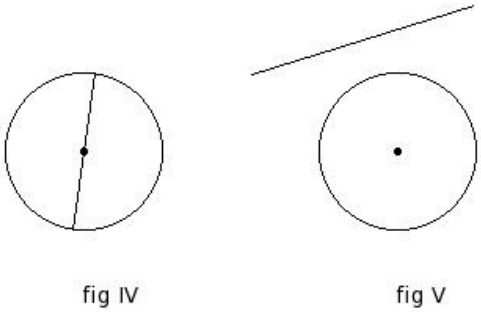


fig IV fig V

(i) fig I (ii) fig IV (iii) fig V (iv) fig II (v) fig III

47. Which of the following figures represent a secant ?

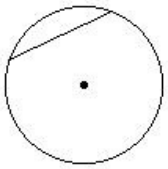


fig I

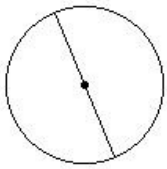


fig II

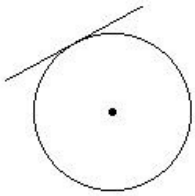


fig III

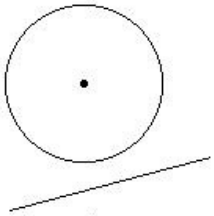


fig IV

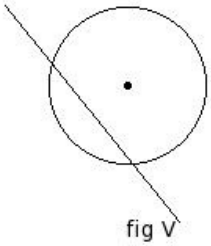


fig V

(i) fig I (ii) fig III (iii) fig V (iv) fig IV (v) fig II

48. Which of the following figures represent a tangent ?

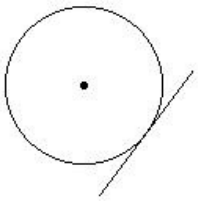


fig I

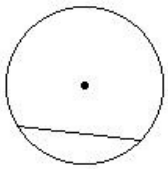


fig II

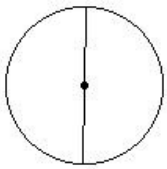


fig III

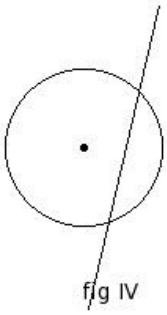


fig IV

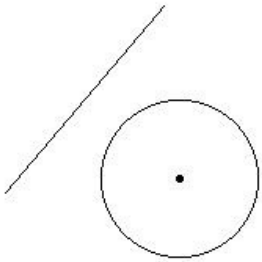


fig V

(i) fig II (ii) fig III (iii) fig V (iv) fig IV (v) fig I

49. In triangle CDE, if a circle is drawn with DE as diameter and if it passes through C it is a

(i) acute angled triangle (ii) obtuse angled triangle (iii) right angle triangle (iv) equilateral triangle

50. Which of the following statements are true?

a) All diameters of a circle are chords.
b) A circle divides the plane into three mutually disjoint sets of points.
c) All chords of a circle are diameters.
d) π is a rational number.
e) $\frac{22}{7}$ is a rational number.

(i) {c,a} (ii) {c,d,e} (iii) {d,b} (iv) {a,b,e} (v) {c,a,b}

51. Points which lie on the circumference of the circle are called

(i) Concurrent points (ii) Concyclic points (iii) Coincident points (iv) Similar points (v) Cyclic points

Assignment Key

1) (iii)	2) (iii)	3) (i)	4) (v)	5) (v)	6) (v)
7) (i)	8) (iv)	9) (ii)	10) (iv)	11) (iii)	12) (iii)
13) (iv)	14) (v)	15) (iv)	16) (v)	17) (i)	18) (i)
19) (i)	20) (ii)	21) (v)	22) (i)	23) (ii)	24) (iii)
25) (ii)	26) (i)	27) (iii)	28) (ii)	29) (i)	30) (i)
31) (iii)	32) (ii)	33) (i)	34) (i)	35) (i)	36) (i)
37) (v)	38) (iv)	39) (iii)	40) (iii)	41) (iii)	42) (iv)
43) (iv)	44) (iv)	45) (v)	46) (ii)	47) (iii)	48) (v)
49) (iii)	50) (iv)	51) (ii)			

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